1 2 3 4 5	WILSON TURNER & KOSMO LLP FREDERICK W. KOSMO, JR. (138036) THERESA OSTERMAN STEVENSON (1292 550 West C Street, Suite 1050 San Diego, California 92101 Tel: 619.236.9600 Fax: 619.236.9669 E-mail: fkosmo@wilsonturnerkosmo.com E-mail: tstevenson@wilsonturnerkosmo.com	272)	
6	HOWREY LLP PETER J. CHASSMAN (admitted pro hac vice		
7 8	GREGORY A. DUFFEY (admitted pro hac vio 1111 Louisiana, 25 th Floor Houston, Texas 77002	ce)	
9	Tel: 713.787.1400 Fax: 713.787.1440		
10	E-mail: chassmanp@howrey.com E-mail: duffeyg@howrey.com		
11	Attorneys for Defendant and Counterclaimant HTC Corporation		
12	Tire corporation		
13	UNITED STAT	TES DISTRICT	COURT
14	SOUTHERN DIS	TRICT OF CA	LIFORNIA
15	DATAQUILL LIMITED,	Case No. 080	CV543-IEG (BGS)
16	Plaintiff,		PRATION'S OPENING BRIEF
17	V.	(REEXAMIN	CUCTION OF CLAIMS OF (ED) U.S. PATENT NOS.
18	HIGH TECH COMPUTER CORP.,	6,058,304 AND	, ,
19	Defendant.		OR JURY TRIAL ed: March 24, 2008
20	LITE CORDOD ATION	1 1	,
21	HTC CORPORATION, Counterclaimant,	Hearing Date: Hearing Time	January 28, 2011 : 9:00 a.m.
22	V.	Location: Judge:	Courtroom 1 Hon. Irma E. Gonzalez
23	DATAQUILL LIMITED,	Magistrate Judge:	Hon, Bernard G. Skomal
24	Counterdefendant.	Trial Date:	Not Set
25			
26			
27			

CASE NO. 08cv543 IEG (BGS)

28

TABLE OF CONTENTS

2	I.	INTRODUC	TION	1
3	II.	BRIEF PROG	CEDURAL HISTORY OF THE CASE	1
4	III.	THE PATENTS AND ASSERTED CLAIMS		
5		A. Discl	osure and Stated Goals of the Patents	1
6		B. Issuar	nce and Reexamination of the Patents	4
7	IV.	LEGAL PRI	NCIPLES OF CLAIM CONSTRUCTION	5
8 9	V.		TTLED TO ITS OWN DAY IN COURT ON THE ED CLAIMS	7
10	VI.	PROPOSED	CLAIM CONSTRUCTIONS	8
11		A. Clain	n Terms	8
12		1.	Terms Involving "Reading Sensors" and Other Types of "Sensors"	8
13		2.	"Process said input signals"	13
14		3.	"Camera" terms	15
15		4.	"Carrier" terms	17
16		5.	"Up to date" and "Updating" terms	19
17		6.	"Means for Displaying" Terms	26
18		7.	"Written text" terms	28
19		8.	"Natural language" terms	29
2021		9.	"Comprises one or two manually operable switches for scrolling said display in a first and/or second direction"	30
22		10.	"Downloading" and "To Download" Terms	33
23	VII.	CONCLUSIO	ON	34
24				

25

26

27

28

TABLE OF AUTHORITIES

2	FEDERAL CASES
3	Abtox, Inc. v. Exitron Corp.,
4	131 F.3d 1009 (Fed. Cir.), modifying Abtox, Inc. v. Exitron Corp., 122 F.3d 1019 (Fed. Cir. 1997)
56	Altiris, Inc. v. Symantec Corp., 318 F.3d 1363 (Fed. Cir. 2003)
7	Apple Computer, Inc. v. Articulate Sys., Inc., 234 F.3d 14 (Fed. Cir. 2000)
89	Bicon, Inc. v. Straumann Co., 441 F.3d 945 (Fed. Cir. 2006)29
10	Boss Control, Inc. v. Bombardier Inc., 410 F.3d 1372 (Fed. Cir. 2005)
12	Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106 (Fed. Cir. 2002)6
13 14	Caterpillar Inc. v. Deere & Co., 224 F.3d 1374 (Fed. Cir. 2000)
15 16	Hakim v. Cannon Avent Group, PLC, 479 F.3d 1313 (Fed. Cir. 2007)25
17	Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352 (Fed. Cir. 2004)6
18 19	Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111 (Fed. Cir. 2004)
	Innovad Inc. v. Microsoft Corp., 260 F.3d 1326 (Fed. Cir. 2001)32, 33
21 22	Jonsson v. Stanley Works, 903 F.2d 812 (Fed. Cir. 1990)
23	Multiform Dessicants, Inc. v. Medzam, Ltd., 133 F.3d 1473 (Fed. Cir. 1998)
25	Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314 (Fed. Cir. 2003)
26 27	Ormco Corp. v. Align Tech., Inc., 498 F.3d 1307 (Fed. Cir. 2007
28	

- 11	
1	Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005)6, 21
2	Phonometrics, Inc. v. N. Telecom Inc., 133 F.3d 1459 (Fed. Cir. 1998)5
4	Power Integrations, Inc. v. Fairchild Semiconductor Int'l., Inc., 2008 U.S. Dist LEXIS 102716 (D. Del. December 19, 2008)8
5	Springs Window Fashions LP v. Novo Indus., L.P.,
6	323 F.3d 989 (Fed. Cir. 2003)25
7 8	Wang Lab., Inc. v. Am. Online, Inc., 197 F.3d 1377 (Fed. Cir. 1999)21
9	FEDERAL STATUTES
10	35 U.S.C. section 102(e)
11	35 U.S.C. section 112
12	35 U.S.C. section 1194
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	;;;

I. INTRODUCTION

HTC Corporation ("HTC") submits this brief concerning the proper construction of the disputed terms of the asserted claims¹ of two patents asserted by DataQuill Limited ("DataQuill") – U.S. Patent Nos. 6,058,304 ("the '304 patent") (Ex. A) and 7,139,591 ("the '591 patent") (Ex. B)². The '304 and '591 patents are referred to collectively as the patents-in-suit.

II. BRIEF PROCEDURAL HISTORY OF THE CASE

In late 2006 and early 2007, a third party filed requests with the United States Patent and Trademark Office ("USPTO") to reexamine the patents-in-suit on the basis of substantial new questions of patentability based upon certain prior art references. The USPTO granted those requests. DataQuill filed the present case against HTC on March 24, 2008, alleging infringement of the patents-in-suit, while the patents-in-suit were in reexamination. On April 1, 2009, HTC filed a motion to stay the case pending reexamination of the patents-in-suit. On May 14, 2009, this Court granted HTC's request to stay the case. On December 8, 2009, the Court entered an order extending the stay of the case, pending completion of the reexaminations. On April 1, 2010, upon conclusion of the reexaminations, the Court lifted the stay.

III. The PATENTS AND ASSERTED CLAIMS

A. Disclosure and Stated Goals of the Patents

The patents-in-suit³ disclose a data entry system that includes a hand held data entry unit that has a reading sensor for sensing commands and data. '304 patent abstract, 2:13-16; 4:52-56.

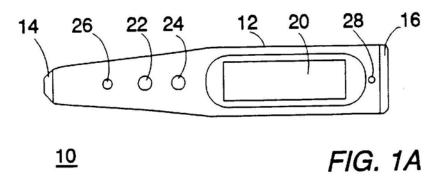
¹ DataQuill has identified the following claims as being asserted in this case ("the asserted claims") (grouped in order of dependencies): for the reexamined '304 patent, claims 62, 64, 65, 66, 67, 69, 70, 73, 75, 76, 77, 78, 79, 39, 40, 44, 45, 47, 52, 53, 55, 56, 57, 59, 60, 80, 81, 82, 83, 85, 86, 94, 95, 97, 98, 100, 101, 103, 104, 107, 109, 113, 115, 8, 9, 12, 13, 20, 22, 23, 32, 34, 35, 39, 40, 41, 44, 45, 47, 52, 53, 55, 56, 57, 59 and 60; for the reexamined '591 patent, claims 32, 33, 35, 38, 39, 40, 41, 42, 44, 47, 48, 54, 55, 56, 59, 60, 61, and 62. HTC contends that this is an excessive number of claims to be carried through claim construction, discovery and trial and intends to move the Court to limit the number of claims that DataQuill may assert, by a date certain.

² All citations to exhibits are to the Declaration of Gregg A. Duffey with HTC's Exhibits of Markman Materials filed concurrently. Page numbers appearing in [brackets] refer to the exhibit footer page numbers.

³ DataQuill filed the application for the '591 patent as a second continuation of the application for the '304 patent, so the patents have specifications substantially identical to one another, essentially with the exception of differences in column and line references. Because the specifications are essentially identical, in many instances, HTC may cite only to the '304 patent or the '591 patent (in the format of "column:line number"), but analogous references could be made to the other patent specification. Further, even though HTC has cited to certain specific examples of evidence in this brief, it still relies upon all of the intrinsic and extrinsic evidence cited in the Joint Claim Construction Chart (Document 61).

The patents-in-suit explain the motivations for the alleged invention including: the bulkiness of prior art data entry systems ('304 patent, 1:23-26, 2:8-10); the need for two hands to operate the prior art data entry systems ('304 patent, 1:23-26); the problem that an abundance of keys on prior art data entry systems led to keys being pressed inadvertently ('304 patent, 2:8-10).

The preferred and only disclosed embodiment has the shape of a thick pen that can be held and operated using a single hand and the patents refer to the data entry device as "the pen." '304 patent, 6:28-35 ("The pen 10 is intended to be held for essentially one handed operation between the thumb and forefinger of either the left or right hand in the manner of a conventional, if rather thicker than usual, pen."). Figure 1A shows a top view of this embodiment:



According to the patents, this "pen" contains a reading sensor in a reading head. '304 patent, 5:35-43. Examples of reading sensors disclosed by the patent are bar code readers and dot code readers that can read coded data and commands, as well as reading sensors that enable recognizable characters to be traced on a surface in a manner that can be recognized by the device. '304 patent, 3:47-65. Another example is a camera with character or image recognition logic. '304 patent, 5:35-43. The idea is that the reading sensor is capable of recognizing commands or data that it senses and generating a signal that it sends as an input signal to a controller to process and to use to look up information in memory in the pen concerning items represented by the sensed commands or data or items that the user has selected. '304 patent, 10:10-36. The pen's user can use the reading sensor to read information from an external object that, in turn, is used to select a "selectable item" and retrieve information from the pen's memory

about the selectable item and transmit information about that item to a remote data processing center through a telecommunications interface. '304 patent, 12:12-37. The telecommunications interface enables the pen both to transmit and receive data and commands. '304 patent, 2:51-3:27, 4:20-26. The patent describes an application of the pen in the context of a merchandise catalog. '304 patent, 10:35-36, 49-61, 11:35-44. Accordingly, the scanned codes selectable items may be items for sale. Another key part of the pen is a display that enables a user to see selections representations of commands and information.

Of critical importance is that the patent explains how the reading sensor is used to eliminate the need for a keyboard, which the patent regards as problematic. Specifically, the patent discloses a carrier, such as a sheet of material that contains a plurality of data and/or command codes that can be recognized by the reading sensor. '304 patent, 5:18-43, 52-56. Figure 6 of the '304 patent provides an example of codes on a carrier:

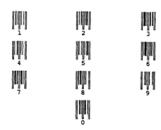




FIG. 6

The pen's reading sensor is used to read these codes in lieu of entry through a conventional keyboard or key pad. The patent also explains that the carrier even could be so extensive in content that "characters and commands could be arranged in the manner of a

standard typewriter keyboard layout to facilitate entry of individual codes." '304 patent, 5:53-56. The goal of such an arrangement is to eliminate a keyboard. "By including the command characters as well, the need for a lot of keys on the data entry device can be avoided." '304 patent, 5:33-34. The idea is that, instead of including a problematic keyboard in the pen, the reading sensor could be used to input commands and data instead. "The control card can be thought of as a keyboard extension for the pen 10." '304 patent, 9:60-65.

The patent further explains that the objective of minimizing the number of keys is accomplished through both the inclusion of the reading sensor and only one or two switches for performing selected functions:

By arranging that the reading sensor can be used for the input of commands for controlling the hand held unit, the number of user input means (e.g., keys) can be kept to a minimum, reducing the possibility of inadvertent operation. Preferably, there are provided one or two manually operable switches for scrolling the display in a first and/or second direction for selectively displaying a plurality of data stored in the [memory] storage. The scrolling of the display enables a large number of items to be accessed with a relatively compact display. In a preferred embodiment of the invention, the first and/or second switches are the only switches on the hand held unit. Preferably also, operation of the first and/or second switches in predetermined operational states of the hand held unit causes predetermined functions other than scrolling functions to be performed (e.g., powering-up or powering-down of the hand held unit). By the provision of only two keys on the hand held unit, the possibility of accidentally operating an incorrect key can be reduced, and also the hand held unit can be kept particularly compact.

'304 patent, 3:28-46 (emphasis added). The switches, however, are not a part of the reading sensor. "The switches 22 and 24 are used to control basic operations of the data entry system and for control of the sequential display of stored information (scrolling of the display)...". '304 patent, 7:15-17.

B. Issuance and Reexamination of the Patents

As discussed above, the patents-in-suit are related, in that the '591 patent issued from a second level continuation application of the application for the '304 patent. Because the terms of the patents are to be construed from the perspective of a person of ordinary skill in the art at the time the applications for those patents were filed, the Court should note that the original Patent Cooperation Treaty ("PCT") patent application that led to the '304 patent (and ultimately to the '591 patent as well) was filed on September 27, 1994, and that application claimed priority under 35 U.S.C. § 119 to British application no. GB9321133, filed October 13, 1993. A chart showing

the relationship of these patents and applications is attached in Tab 1 to the Declaration in Support of HTC's Motion, filed concurrently. A decision as to whether that priority claim was proper is not a part of the claim construction proceedings.

As noted above, a third party filed requests with the USPTO for *ex parte* reexamination of the claims of the '304 and '591 patents. The USPTO granted those requests on the basis that they raised substantial new questions of patentability concerning the claims of those patents. During reexamination, many of the claims that DataQuill asserts in this case were amended to varying degrees – in some cases, substantially. The prosecution history concerning the reexaminations, including amendments made to claims, all became part of the intrinsic record, and the Court should consider them as primary evidence in construing the claims. At the conclusion of the reexaminations, the USPTO issued reexamination certificates for each of the patents-in-suit *See* Ex. A [30-59] and Ex. B [98-114]. The reexamination certificates show the changes from the original claims by showing text newly added during the reexamination proceedings in *italics* and by showing text deleted during the reexamination proceedings in *[brackets]*.

IV. LEGAL PRINCIPLES OF CLAIM CONSTRUCTION

Claim construction is a question of law to be resolved by the court. *See Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 20 (Fed. Cir. 2000).

"The appropriate starting point . . . is always with the language of the asserted claim itself." *Phonometrics, Inc. v. N. Telecom Inc.*, 133 F.3d 1459, 1464 (Fed. Cir. 1998) (citations omitted). "It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such a person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field." *Multiform Dessicants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998).

When construing claims, words of a claim are generally given their ordinary and customary meaning to a person of ordinary skill in the art. *See Phillips v. AWH Corp.*, 415 F.3d

20 21

22 23

24 25

27

28

26

1303, 1312-13 (Fed. Cir. 2005) (en banc); Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352, 1358 (Fed. Cir. 2004) (finding "customary meaning" refers to the customary meaning in the art field). As the Federal Circuit has made clear, this "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e. as of the effective filing date of the patent application." Phillips, 415 F.3d at 1313. "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." Id.; see Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004). Courts look to "those sources available to the public that show that a person of skill in the art would have understood disputed claim language to mean." Phillips, 415 F.3d at 1314 (quoting *Innova/Pure Water*, 381 F.3d at 1116). "Those sources include '[1] the words of the claims themselves, [2] the remainder of the specification, [3] the prosecution history, and [4] extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." Phillips, 415 F.3d at 1314 (quoting Innova/Pure Water, 381 F.3d at 1116). All terms in a claim are presumed to have meaning. *Id.* at 1119.

When construing claims, the context in which a term is used in an asserted claim can be highly instructive. *Phillips*, 415 F.3d at 1314 (noting that the claim term "steel baffles" strongly implies that the term "baffles" are objects not made of steel). Further, each word used in a claim is presumed to have meaning. *Innova/Pure Water*, *Inc.*, 381 F.3d at 1119.

A patentee may use functional language in a claim pursuant to 35 U.S.C. § 112 ¶ 6. Construction of a means-plus-function limitation involves two steps. First, the claimed function must be identified. Second, the structure, if any, disclosed in the specification that corresponds to the claimed function must be identified. To correspond to the claimed function, "the structure must not only perform the claimed function, but the specification must clearly associate the structure with the performance of the function." Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002). Although the corresponding structure need not include all things necessary to enable the claimed invention to work, it must include all structure that actually performs the recited function. Id. at 1119. When the term "means for" is used in a

claim term without claiming the structure for performing the claimed function, it is presumed that 112 ¶ 6 is invoked. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). Moreover, a means-plus-function claim limitation "shall be construed to cover the corresponding structure . . . described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6; *see also Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 1379 (Fed. Cir. 2000).

"A patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history." *Boss Control, Inc. v. Bombardier Inc.*, 410 F.3d 1372, 1377 (Fed. Cir. 2005).

The claims must be construed from the perspective of a hypothetical person of ordinary skill in the art at the time a patent application is filed. The fields of art of the '304 and '591 patents were data entry device, sensor, and data processing technologies. While it is not clear at this time what the appropriate priority date would be for any given asserted claim, the time period for determining who a hypothetical person of skill in the art would have been would have been between October 13, 1993 and September 27, 1994. Accordingly, one of ordinary skill would have had a bachelor's degree in electrical engineering and several years of experience in the field or in graduate research.

V. HTC IS ENTITLED TO ITS OWN DAY IN COURT ON THE REEXAMINED CLAIMS

DataQuill has asserted the original '304 and '591 patents against various opponents in past cases, and, in the claim construction process in this case has attempted to rely on courts' decisions in those past cases as support for its proposed constructions in this case. While courts, including this Court, have construed terms of the original '304 patent, and, in one case, the '591 patent, HTC has never been a party to any such previous claim construction proceedings, and no court has construed the terms of these patents post reexamination. Any previous constructions are not and should not be binding on HTC. Accordingly, HTC is entitled to its day in court to make its own arguments and to present the evidence of its own choice in the manner it believes

appropriate, despite DataQuill's reference to past claim constructions in support of certain of its positions.⁴

VI. PROPOSED CLAIM CONSTRUCTIONS

Many terms and variants of those terms appear repeatedly throughout the claims asserted by DataQuill. In a number of cases, the variations in claim term wording have a significant impact on the proper construction of the term. For purposes of efficiency, in discussing how the disputed claim terms should be construed, where appropriate, HTC has grouped terms from claims of the '304 and '591 patents that are the same, that are variants, and/or that relate to the same concept, below. This should avoid repetition of the same discussion for the same concepts and also contrast the differences in term variations.

A. Claim Terms

1. Terms Involving "Reading Sensors" and Other Types of "Sensors"

Term	Claims	HTC's Proposed	DataQuill's Proposed
	Containing	Construction	Construction
	Term		
"sensor"	'591 Patent Independent 47, 61, 62 Dependent 35, 59, 60	a structure capable of detecting a stimulus, such as light, temperature, radiation level, or the like, and that transmits a resulting signal.	means what it says, "a sensor" and no elaboration is needed. In alternative, a structure capable of detecting a stimulus, such as light, temperature, radiation level, or the like, and that transmits a resulting signal.

⁴ When DataQuill attempted to limit HTC's discovery in the present cases because HTC's counsel had been involved in other cases involving the patents in suit, this Court remarked, "The completion of discovery in the Texas action is irrelevant. Other courts evaluate the extent discovery has been completed in related cases only when both actions involve the same parties and issues. See, e.g., Power Integrations, Inc. v. Fairchild Semiconductor Int'l., Inc., 2008 U.S. Dist LEXIS 102716 at *5-6 (D. Del. December 19, 2008). However, HTC was *not* a party to the Texas Action. HTC is entitled to its own discovery and claims construction proceeding. The participation of HTC's *counsel* in other suits is immaterial to HTC's right to discovery in this action. Further, the '591 patent was not at issue in the Texas action." Order Granting HTC's Motion to Stay (Document No. 29) at 4. (bolding added; italics in original).

HTC's Proposed

a structure capable of

detecting a stimulus, visually,

magnetically, or by locational

movement of the structure

across a surface, and that

for use by a controller to

determine the data or

stimulus.

transmits a resulting signal

commands represented by the

Construction

DataQuill's Proposed

a structure capable of

detecting and reporting

Alternatively: a sensor

capable of detecting and

reporting commands or

Construction

data:

data.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
	ı

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Term

"reading sensor"

Claims

Containing
Term
'304 Patent

Independent

62, 64, 78, 80,

81, 82, 83, 85, 86, 94, 95, 97,

98, 100, 101,

103, 104, 107,

109, 113, 115

65, 76, 77, 9,

12, 40, 41, 44,

Dependent

47

With the exception of claim 32 of the '591 patent and claims dependent therefrom, all of the asserted claims in this case call for some type of sensor. An issue central to this case is the difference between a "sensor" and a "reading sensor." Under the basic principles of claim construction and as a matter of common sense, there must be a difference between the meanings of these two terms – and there is.

Claims 47, 61, and 62 of the '591 patent call for a **sensor**. Claims 9, 12, 40, 41, 44, 47, 62, 64, 65, 76, 77, 78, 80, 81, 82, 83, 85, 86, 94, 95, 97, 98, 100, 101, 103, 104, 107, 109, 113, and 115 of the '304 patent and claim 62 of the '591 patent call for a **reading sensor**. Thus, claim 62 of the '591 patent calls for **both** a **sensor** and a (separate) **reading sensor**, further emphasizing the critical difference between a sensor and a reading sensor.

As a starting point, a **sensor** should be construed to mean "a structure capable of detecting a stimulus, such as light, temperature, radiation level, or the like, and that transmits a resulting signal," when read in the context of the claims in which it appears. While DataQuill's initial position is that the claim should be construed to have its plain meaning, DataQuill's alternative definition is the same as HTC's proposed construction. Accordingly, HTC contends

CASE NO. 08cv543 IEG (BGS)

⁵ Each instance of "reading sensor" appearing in the claims should be construed consistently. Thus, while the Parties have attempted to highlight all instances of "reading sensor" on the Joint Claim Construction Chart (document 61) and Joint Claim Construction Worksheet (document 62), should a "reading sensor" term not appear bolded in the Chart or Worksheet, or not appear in this listing, such "reading sensor" term should nonetheless be construed as set forth herein.

that the Court should adopt the agreed construction for this term. *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th Ed. 1993) (Ex. C. [133]): "a device that responds to a physical stimulus (as heat, light, sound, pressure, magnetism, or a particular motion) and transmits a resulting impulse (as for measurement or operating a control)."

In contrast to a "sensor," a "reading sensor" should be construed to mean a structure capable of detecting a stimulus, visually, magnetically, or by locational movement of the structure across a surface, and that transmits a resulting signal for use by a controller to determine the data or commands represented by a stimulus." This definition differs from the definition of "sensor" in that it describes *a more specific type of sensor* – one that "reads." This construction is thoroughly supported by the intrinsic record – by usage in the language of the claims, by disclosure in the patent specification, and by DataQuill's own arguments during patent prosecution.

Starting with the language of the claims themselves, in each instance where a claim contains the term "reading sensor," the reading sensor generates outputs referred to as "input signals" that serve as inputs to a **controller** that will "**process**" the input signals. For example, '304 patent claim 62 recites (emphasis added), in part:

* * *

a controller coupled to said reading sensor to receive and **process said input signals**;

said controller coupled to a communications inter-face to selectively control transmission over said communications interface of **command and/or data** signals as determined by said input signals processed by said controller

* * *

Thus, the combination of the terms "reading sensor" and "process said input signals" in the claims is not coincidence. These two terms and the functionalities that they claim work in tandem to implement the "reading" of data or commands. The construction of "process said input signals" is discussed in the next section, below.

Each of the claims calling for a "reading sensor" makes it clear that the reading sensor is either "responsive to commands and/or sensed commands and data" or used "for sensing commands and/or data." This language makes it clear that the reading sensor serves a particular

purpose – to sense or respond to commands and data. In order to sense or respond to commands, the reading sensor must be able to *read* those commands or data. This is more than simply sensing a generic, external stimulus – it is *reading* and responding to commands and data that the reading sensor senses. Similarly, other claims call for a sensor that is operable "for sensing user commands or data" or "to sense and capture data."

Turning to the patent specification, the very purpose of the reading sensor is to eliminate the need for keyboard keys for entering commands or data: "By arranging that the reading sensor can be used for the input of commands for controlling the hand held unit, the number of user input means (e.g., keys) can be kept to a minimum, reducing the possibility of inadvertent operation." '304 patent, 3:28-31. The patent further explains:

The hand held data entry unit may comprise a reading head including a reading sensor for producing input signals, wherein the reading sensor traces movements of the reading head and wherein the controller is responsive to signals from the sensor representative of the movements for identifying characters traced by the reading head as captured data. In this manner data entry can be made in an advantageous manner by tracing out the characters of the data to be input or characters representing commands for controlling the operations of the data entry system.

'304 patent, 3:56-65.

Again, such a sensor must be able to capture meaningful information that is *understandable* to the data entry device and not just sense information or stimuli generally. The patent explains that the combination of the reading sensor and a processor enable the data entry device to determine what has been read by the patent. '304 patent, 9:66-10:34. Examples in the patent are devices that can read bar codes, dot codes, magnetic strips, graphical representations and/or alpha-numeric characters visually, magnetically, or by locational movement of the reading head. '304 patent, 5:18-43, 13:36-48; '591 patent 12:1-7, 5:30-37, 13:14-27 (bar code and/or dot code readers); '591 patent 4:10-19 and 14:15-31, '304 patent 3:56-65 and 13:52-14:1 (tracing motion detector); '304 patent 13:36-48 (magnetic strip reader); and '304 patent 5:35-47, 17:52-58 (camera having character or image recognition capability).

DataQuill's very own arguments during reexamination of the '304 patent admitted the difference between a sensor (such as a camera), and a reading sensor. DataQuill argued a

distinction between its claimed reading sensor and the sensor (camera) disclosed in the prior art Martinez reference (Ex. I [2326-2333]):

It is respectfully submitted that Martinez does not disclose the limitations of element 1.1 [a reading sensor responsive to *commands* and/or *sensed commands* and data to produce input signals"]. Element 1.1 requires that a "reading sensor" must be "responsive to *commands* and/or *sensed commands* … to produce input signals." *Martinez* does not disclose a camera that is responsive to *commands* or to *sensed commands*. Instead, at the cited passage, *Martinez* discloses a video camera "to view the user or a customer, and to generate a video signal." (*Martinez* Col. 5:49-6:2.). For at least the above reasons, Martinez does not anticipate independent Claims 1-3 and their dependent claims.

June 2, 2008 Response to Office Action (Ex. G [1486-1653]) in reexamination of '304 patent, at p. 78 (emphasis in original) (Ex. G [1527]). DataQuill continued:

In any event, it is apparent why Requester did not cite any support for its assertion. Martinez does not provide such disclosure. For instance, adopted Exhibit S, relies upon *Martinez's* camera to meet the "reading sensor" requirement of prior Elements 26.1, 27,1, 28.1, 29.1 and 30.1. The Martinez's camera, however, is only used to send an image of a customer "to a remote television screen" (Col. 6/Il. 50-52) as a way to verify that person's identity. *Martinez*, of course, has no disclosure or teaching at all of using its camera to select form a plurality of items that have information programmed into storage, as required by elements 26.2 and 29.2 [rewritable storage programmable with information relating to a plurality of items, user selectable by means of said reading sensor]. A reading sensor of *Martinez* must meet this limitation in these Elements and *Martinez* camera certainly does not.

Id. at 86-87 (emphasis in original) (Ex. G [1535-1536]).

Importantly, the USPTO accepted and agreed with DataQuill's arguments in allowing the reexamined claims of the '304 patent, calling for a reading sensor, over the Martinez reference and its disclosure of a camera:

Patent owner argues on page 78 that Martinez fails to teach a reading sensor 'responsive' to commands and/or sensed commands. Instead, it is argued, Martinez teaches a convention video camera 'to view the user or a customer, and to generate a video signal.' The remaining independent claims rejected under Martinez, specifically claims 26-30, similarly recite a reading sensor responsive to sensed command. See pages 86-88 of the Amendment. The patent owner's arguments above have been duly considered and are deemed persuasive. Although the claim language could broadly read upon Martinez (e.g., reading a video camera as the reading sensor responsive to commands), such an interpretation would not be reasonable consistent with the specification of the patent under reexamination. Thus, Martinez appears unsuitable as both an

3

4 5

6 7

8

9 10

11 12

13

14 15

16

17

18

19 20

21

22

23

24

25 26

27

anticipatory reference and as a base reference in an obviousness inquiry. Thus, all rejections based upon Martinez are withdrawn and not repeated in the present Office action.

June 25, 2009 Office Action (Ex. G at [1677]) at 22.

2. "Process said input signals"

Term	Claims	HTC's Proposed	DataQuill's Proposed
	Containing Term	Construction	Construction
"process said input signals"	'304 patent Independent 62, 64, 78, 80, 81, 82, 83, 85, 86, 94, 95, 97, 98, 100, 101, 103, 104, 107, 109, 113, 115	perform operations on the input signals, including, but not limited to determining the content represented by the stimulus detected by the reading sensor	Means what it says and no elaboration is needed. Alternatively: subject the input signals to examination or analysis. Alternatively: perform any operation or combination of operations on the input signals. Alternatively: manipulate the input signals.

As an example, '304 patent claim 62 calls in part for:

- 62. A data entry device for use in a data entry system, said data entry device comprising:
- a reading sensor responsive to commands and/or sensed commands and data to produce input signals;
- a controller coupled to said reading sensor to receive and process said input signals:
- said controller coupled to a communications interface to selectively control transmission over said communications interface of command and/or data signals as determined by said input signals processed by said controller;

'304 patent claim 62 (emphasis added). Claim 62 is exemplary of the use of the term "reading sensor" in conjunction with the term "process said input signals." The data entry device contains a reading sensor. In response to commands or data input to the reading sensor, the reading sensor produces input signals, which, in turn, function as inputs to a controller. Thus, the controller is coupled to the reading sensor on the one hand (receiving input signals from the

reading sensor) and is coupled to a communications interface on the other hand. It is clear from context that the controller takes the input signals (generated by the reading sensor) and in turn controls the "transmission of command and/or data signals as determined by said input signals processed by said controller." Thus, the controller determines what those command and/or data signals are. How? By **processing** them. That determination of the content is a part of what is done by a controller in conjunction with a reading sensor (as opposed to simply a sensor). *See, e.g.*, '304 patent 9:14-20 ("The processor is programmed by means of control programs and data stored in the ROM 76 and, in use, in the RAM 78, to receive signals from the reading head 14, to interpret those signals into derived data therefrom which are displayed on the display 20 and stored in the RAM 78 for subsequent transmission via the optical interface as will be described in more detail below.")

In order for the reading sensor to sense commands, the data entry device ultimately must be able to interpret the information sensed by the reading sensor as, in fact, constituting commands or data. According to the claim and the patent's disclosure, the reading sensor reads commands and data and generates an input signal that is input to the controller. '304 patent, 4:20-23, 8:36-58; FIG. 3. It is the controller that interprets these input signals as commands or data. '304 patent, 14:40-43. The patent also discusses this aspect of the device as a "processor" implemented with a microprocessor or Application Specific Integrated Circuit (ASIC). '304 patent, 8:36-63, 15:11-17, 9:14-15, FIG. 3 (processor 74), FIG. 11 (ASIC 150).

None of DataQuill's multiple stated positions captures this aspect of processing the input signals generated by the reading sensor to determine the data or command content of what the reading sensor reads. Aside from DataQuill's initial position, which is that the Court need not construe the term, each of DataQuill's proposed constructions is completely generic and ignores what should be the Court's first consideration – the contextual language of the claims themselves, including the importance of the linkage between the reading sensor and the operations that the controller must perform on the signals generated by the reading sensor in order to determine their content as data or commands.

3. "Camera" terms

Term	Claims containing the term	HTC's Proposed Construction	DataQuill's Proposed Construction
"camera"	'304 Patent <u>Dependent</u> 13, 45	a device that can capture an image, which could be an image of one or more characters, and recognize the contents of the image when used in combination with a processor which may execute image recognition software	means what it says and no elaboration is needed
	'304 Patent Dependent 73*	a device that can capture an image	means what it says and no elaboration is needed
	'591 Patent <u>Independent</u> 35*, 62*		
	*Revised from Joint Claim Construction Worksheet		

Claim 13 of the '304 patent is dependent upon claim 12 of the '304 patent, which is dependent upon a number of claims, including claim 80, for example. Among other things, claim 80 calls for a reading sensor. *See* '304 patent reexamination certificate. Claim 12 adds the limitation of "wherein said reading sensor is a motion detector or a scanning device." Claim 13 adds the limitation that "wherein said scanning device is a camera." *See* original '304 patent. Thus, through claim dependencies, the type of camera that would be necessary to constitute a scanning device that constitutes a reading sensor would be one that would have to have the ability to read, i.e., recognize the contents of the data it is sensing. Thus, the requirements for a reading sensor are implicated (as the claim essentially claims the camera as a form of reading sensor). The only types of cameras disclosed in the patent specification as reading sensors are those that can capture an image and recognize the contents of the image when used in combination with a processor executing image recognition software. '304 patent 5:35-43, 17:52-58. The patent explains: "As an alternative to the use of bar codes, other *data representations*

could be used. Indeed, if the data entry device is provided with a reading sensor in the form of a camera or other scanning sensor rather than a bar code reader, and the data entry device is provided with character or image recognition logic, graphical or alphanumeric data representations can be captured directly. One application of an embodiment of the pen with a camera head as its sensor could be for fingerprint recognition." '591 patent, 5:55-63, '304 patent, 5:35-43) (emphasis added). The preceding excerpt indicates that the camera is intended to capture data *representations*. The idea of a representation is that it stands for something else. In order to determine what is being represented, the data entry device must be able to interpret the captured data.

Claim 45 depends from claim 44. Claim 44 depends from a number of claims, including claim 78, for example. Among other things, claim 78 calls for a reading sensor. Claim 44 adds the limitation of "wherein a said reading sensor is a motion detector or a scanning device." Claim 45 adds the limitation of "wherein said scanning device is a camera." Thus, the same definition of camera applies for claim 45 as for claim 13.

Claim 73 of the '304 patent is slightly different. Claim 73 is dependent upon claim 64. Claim 64 of the '304 patent calls for a reading sensor, among other elements and limitations. Claim 73 includes the further limitations of "wherein said hand held device also comprises: camera coupled to said controller, and wherein, (i) said camera is operable to sense and capture data relating to a plurality of selectable items for storage of said data by said solid state memory for later user access; and (ii) said network interface is operable to transmit data captured by said camera from said storage, via a said cellular telephone network; and (iii) said data is made of one or more images..." Unasserted claim 74 adds the further limitation to claim 73 that "said camera is operable to sense and capture user visible codes." Thus, in addition to requiring a reading sensor, claim 73 requires a camera that sense and captures data relating to a plurality of selectable items. The patent claim provides no explanation as to how the data is or can be related to the plurality of selectable items through operation of the device. Accordingly, to the extent that the device is intended to make such a relationship, it must have the capability to comprehend the data that it senses. To the extent the device is not intended to make such a relationship, the

 camera need not have that capability and the definition of "a device that can capture an image" would apply.

Turning to the '591 patent, claim 35 depends from claim 32. Claim 32 does not require a reading sensor, but instead requires a touch sensitive screen, by contrast. The touch sensitive screen is used by a user for selecting user selectable items. Claim 35 adds the further limitation that the "portable hand held computer comprises a sensor operable to sense and capture data wherein said sensor is a camera." Thus, the definition of "a device that can capture an image" is appropriate.

Claim 62 of the '591 patent calls for a reading sensor and, in addition, a "sensor operable to sense and capture data wherein said sensor is a camera." Claim 62 makes no further use of data sensed and captured by the camera, so, in that regard, it is unclear what requirements the camera must meet. Accordingly, the same definition of "camera" as for claim 35 would apply.

Thus, while the general rule is that claim terms should be construed consistently throughout the patent claims, there may be reasons why a particular term may have different meanings in different claims, as is the case here – because the patentee has used the term inconsistently throughout the claims. The present situation with the term "camera" is such a case. Patentee has used the term camera in some ways in some claims and in other ways in other claims. Thus, for '304 patent claims 13 and 45, "camera" should be construed as "a device that can capture an image, which could be an image of one or more characters, and recognize the contents of the image when used in combination with a processor which may execute image recognition software," and for '304 patent claim 73 and '591 patent claims 35 and 62, "camera" should be construed as "a device that can capture an image."

4. "Carrier" terms

Term	Claims containing	HTC's Proposed	DataQuill's Proposed
	the term	Construction	Construction
"carrier"	'304 patent	a physical medium,	a medium which carries one or
	<u>Independent</u>	separate from and	more data and/or command
	100, 101	external to the data entry	code, character, image, or
	<u>Dependent</u>	device that carries coded	graphical or alphanumeric
	20, 52, 53, 55	data recognizable by the	data representation;
		data entry device as	_

CASE NO. 08cv543 IEG (BGS)

	corresponding to data or	Alternatively: a medium that
	commands	carries one or more data
		and/or command codes

As used in the '304 patent, a "carrier" is an external object that carries a plurality of data or command codes that can be read by a reading sensor. For example, in claims 100 and 101, the "carrier carries a plurality of codes, each for a respective one of a plurality of natural language and/or numeric characters and a plurality of commands for controlling operation of said data entry device or a merchandising system, each code being associated with a visual representation of the corresponding natural language or numeric character or command and/or of a graphical representation thereof, wherein said codes are bar and/or dot codes and/or other product identifications."

As discussed above, one of the primary objectives of the patent is to eliminate the need for a keyboard as the instrumentality for inputting data and commands. '304 patent, 5:18-34. The patent purports to eliminate the need for a keyboard by substituting codes on an external carrier for the user's selection instead. *Id.*; '304 patent, 9:60-65; Fig. 6. The patent explains that "the carrier is preferably in the form of a sheet of material," '304 patent, 5:52-53, or a "control card," '304 patent, 9:60-65, or a "command sheet." '304 patent, 11:13-16. The patent further explains that the codes even "could be arranged in the in the manner of a standard typewriter keyboard layout." '304 patent, 5:53-56. The operator of the data entry device is able to use the data entry device's reading sensor, such as a bar code scanner to read codes from the carrier in order to input data or commands of the user's selection. '304 patent, 5:18-43. It is clear from the wording of the claims and the description in the patent that, because the user is using the reading sensor to read data and commands from the carrier, the carrier necessarily must be external to and separate from the data entry device.

To be complete, it is necessary to address claim 55 of the '304 patent with regard to its use of the term carrier: "55. A data entry system according to claim 53, wherein said carrier comprises a display." Given the discussion in the patent specification of the role that a carrier plays in the operation of the claimed data entry system (for example, to be scanned by a bar code scanner, etc.) makes sense only if the referenced "a display" is a display in addition to the

3

56

7

8

10

11

1213

14

15

1617

18

19 20

21

23

22

24

2526

2728

⁶ For brevity, HTC will focus on this term for construction. However, a total of thirteen (13) terms including this

"update" or "up to date" limitation appear on the Parties Joint Claim Construction Worksheet. For the convenience of the Court, HTC has provided a table in Tab 2 with all of the terms that include the "update" or "up to date"

display screen of the device. See each of asserted claims 78, 81, 107, 108, 109, 112-115, and 118 from which claim 53 depends.

This interpretation is consistent with the language of the patent claims in that claim 55 does *not* say "wherein said carrier comprises the display screen." "A display" is a different term from "a display screen." Moreover, claim 55 does not precede "display" with the word "the," which would reference an antecedent term. Instead, claim 55 precedes "display" with "a." The indefinite article "a" does not make reference to an antecedent term.

This interpretation also is consistent with the patent disclosure as well:

It enables the user to make shopping selections from a catalogue or from a series of options displayed on a television screen from the comfort of his or her home without the need to connect the device to a conventional telephone network. A hand held unit including a wireless telephone network interface such as a cellular network interface finds particular application where the user of the system is travelling from place to place and may need to perform data entry functions when they are far from a conventional wired telephone network socket.

'304 patent, 4:62-5:10

5. "Up to date" and "Updating" terms

the term downloading of information from a independent 64, 80, 82, that has always the same and from the remote processing center only information says	posed
downloading of information from a Independent 64, 80, 82, that has also appeared from the remote processing center only information says	44.9
information from a Independent 64, 80, 82, that has along a from the	nstruction
remote processing center as required for updating information previously stored in said data entry device; that has changed from the information most recently stored in the data entry device elaborated in the data entry device in the data entry device.	nns what it s and no poration is ded

Each of independent claims 64, 80, 82, 83, 85, 86, 94, 95, 97, 98, 100, 101, 103, and 104 of the '304 patent includes the limitation of "downloading of information from a remote processing center as required for updating information previously stored" in the data entry device. The '304 patent specification describes the process of initially storing, in the data entry

CASE NO. 08cv543 IEG (BGS)

18

19 20

21

22

23 24

25 26

27

28

'304 patent, 16:64-17:7 ("In the preferred embodiments described above, catalogue data is downloaded into the pen from a remote processing system by telephone, over the telecommunications interface."). Or, as an alternative to downloading, a complete catalog into the pen via the telecommunication interface, other data entry means could be used to get the catalog information into the pen. Then the telecommunication interface is used only for updating the data in the pen. See '304 patent, 16:64-17:7 (describing the telecommunication interface being used only for updating the stored data). "For example, the pen and/or the base unit as appropriate could be provided with a socket or connector or reader for a memory device (such as a plug-in ROM, a smart card, etc.)." '304 patent, 17:4-7. Regardless of how the original catalog data is stored in the device, once the original

catalog data is stored in the device, then, information related to a selected item, for example, may be updated by sending only the information that has changed -- and not information that has not changed -- from the remote processing center via the telecommunication interface. See '304 patent, 10:49-61 ("However, through the use of rewritable memory and control logic enabling the memory to be updated using data downloaded from the remote processing center, it is possible to keep the pen's memory up to date on a full list of merchandisable items, including product description, availability, price, etc. Then, upon reading a bar code relating to an item stored in memory, the display on the pen can indicate a description of the item corresponding to the code read, its availability, and price. If the code read [by a reading sensor] is not recognized, for example, the pen can be programmed automatically to call up the remote processing center to check on whether an update of the pen's storage is needed when the pen is replaced in the base unit.").

Each time information in the pen becomes obsolete and needs to be updated, the entire catalog of information is not retransmitted to the pen according the '304 patent: only the

limitation discussed in this section. For the reasons set forth in this section, the proper construction for each of these thirteen (13) terms is that proposed by HTC, as shown in Tab 2.

7

8

6

9 10

11 12

13 14

15

16

17

18 19

20

21

22

23

24

25 26

27

information that has *changed* from the information previously stored in memory is transmitted by the remote processing center and downloaded into the pen to update the information in the Thus, in light of the '304 specification, the proper construction of "downloading of information from a remote processing center as required for updating information previously stored" is "transferring from the remote processing center only information that has changed from the information most recently stored in the data entry device."

The file history strongly supports HTC's proposed construction. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc). "[P]rosecution disclaimer may arise from disavowals made during the prosecution of ancestor patent applications." Ormco Corp. v. Align Tech., Inc., 498 F.3d 1307, 1314-1315 (Fed. Cir. 2007); Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1333 (Fed. Cir. 2003). Where the patentee has unequivocally disavowed a certain meaning to obtain his or her patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender. See Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed. Cir. 2003) (and cases cited therein). Further, when the application of prosecution disclaimer involves statements from prosecution of a familial patent relating to the same subject matter as the claim language at issue in the patent being construed, those statements in the familial application are relevant in construing the claims at issue. See, e.g., Wang Lab., Inc. v. Am. Online, Inc., 197 F.3d 1377, 1384 (Fed. Cir. 1999); Jonsson v. Stanley Works, 903 F.2d 812, 818 (Fed. Cir. 1990).⁸ In this

While DataQuill has not proposed an alternative construction, DataQuill seems to imply that a construction broader than that proposed by HTC is proper for these "updating" terms. If that were the case, then, as described herein, DataQuill disclaimed any broader coverage for these "updating" terms during prosecution of the patents-insuit.

⁸ In this case, the specifications of the '304 patent, the intervening application 09/548,565, and the '591 patent are substantially identical. Thus, the prosecution history of the claims of each of these applications is relevant in construing the claims of the patents-in-suit. The same terms appearing in claims of related applications are to be given the same construction. See Abtox, Inc. v. Exitron Corp., 131 F.3d 1009, 1010 (Fed. Cir.), modifying Abtox, Inc. v. Exitron Corp., 122 F.3d 1019 (Fed. Cir. 1997) (improper to construe the same term in related patents differently); Jonsson v. Stanley Works, 903 F.2d 812, 818 (Fed. Cir. 1990) (construction of the same term in related patent relevant to an understanding of that term in patent at issue).

case, and to show DataQuill's apparent proposed construction is incorrect, DataQuill clearly, unmistakably, and unequivocally disavowed claim scope.

As stated above, the application leading to the '304 patent (Application 08/619,682) was filed on May 23, 1996 as the U.S. National filing of PCT application PCT/GB94/02101 (filed September 27, 1994). In the prosecution of the application leading to the '304 patent, DataQuill filed a Preliminary Amendment on April 2, 1996, canceling the original claims of the PCT application filed September 27, 1994, and adding new claims 31-75. (Ex. D [191-199]). *See* April 2, 1996 Preliminary Amendment. Application claim 31 included, *inter alia*, the limitation of "said controller being responsive to a said command to cause downloading of information from said remote processing center as required for updating information previously stored in said rewritable storage for selectable items", hereinafter referred to as "the updating limitation." *See* Preliminary Amendment (Ex. D [191-199]) at 2 (Ex. D [192].

In a First Office Action, the Examiner rejected application claims 31, 53, and others as anticipated by prior art U.S. Patent No. 4,850,009 to Zook (Ex. J [2334-2349], finding that Zook described a portable handset terminal with "the controller being responsive to commands to cause downloading of information from the remote processing center as required for updating information previously stored in the rewritable storage for selectable items (col. 2, lines 48-59; col. 4, lines 29-34; col. 6 lines 36-51; col. 7, lines 9-37)." *See* May 28, 1998 Office Action (Ex. D [640-652]) at pp. 3-4 [643-644]. The Examiner also rejected claims 76 as anticipated by Zook.⁹

In response, DataQuill amended and rewrote, in independent form as new claims, the claims to which the Examiner had objected previously. *See* Dec. 5, 1998 Response to Office Action Ex. D [699-718]) at p. 18 (stating that claims 76 and 77 were combined into claim 86, and application claims 76, 77, and 78 were combined into claim 87). On March 19, 1999, the Examiner rejected then pending claims 86 and 87, *inter alia*, under 35 U.S.C. § 102(e) based on U.S. Patent No. 5,334,824 to Martinez (Ex. I). *See* March 19, 1999 Office Action (Ex. D [725-

⁹ Claim 76 was added by a Second Preliminary Amendment (Ex. D [623-626]), and formed the basis of claim 1 and 2 as issued in the '304 patent, from which claims 64, 80, 82, 83, 85, 86, 94, 95, 97, 98, 100, 101, 103, 104 of the reexamined '304 patent are derived.

729]) at pp. 4-7. In Response, on August 16, 1999, DataQuill amended application claims 86 [issued claim 1 of the original '304 patent] and 87 [issued claim 2 of the original '304 patent] to add the further limitation of application claim 91: "and wherein said controller is responsive to a said command to cause downloading of information from a remote processing center as required for updating information previously stored in said data entry device," described above, and the claims were allowed. See August 16, 1999 Response to Office Action (Ex. D [754-768]) at 2 [756]; see also November 8, 1999 Notice of Allowability (Ex. D [876-878]).

DataQuill continued prosecuting the same family of claims by filing application No. 09/548,565 ("the '565 application") on April 13, 2000, as a continuation of the application leading to the '304 patent. In the '565 application, DataQuill re-filed claims *identical* to those in the parent application that the Examiner had rejected in light of the Zook prior art reference, described above. *See* DataQuill's April 13, 2000 preliminary amendment in '565 application (Ex. E [1031-1055]). In that preliminary amendment, DataQuill cancelled claims 1-30 and added claims 31-77, stating that claims 31-77 "correspond to claims 31-75 entered in the parent application 08/619,682 by amendment dated April 2, 1996; claims 76 and 77 are newly added claims. Consideration of these claims is requested, taking into account the following comments responding to grounds of rejection, particularly in respect of claims 31 and 53, included in the Office Action mailed May 28, 1998 in the parent application".

To overcome the earlier prior art rejections of the identical pending claims (based upon the Zook prior art reference) made during the prosecution of the parent application, in the Preliminary Amendment filed in the '565 application, DataQuill elaborated that one of skill in the art would have understood that the "updating limitation" required that only information that had changed be downloaded – a feature that DataQuill argued was not disclosed in the prior art Zook reference:

[A]s the hand held unit only downloads information that has changed, the time taken to update the information in the rewritable storage is dramatically less than the time taken to update prior art devices where all the information stored in the

¹⁰ This claims included the limitation that the wireless network was a cellular network, which the Examiner did not find in the prior art at the time. However, as evidenced by the reexamination proceedings, these claims were not patentable.

device is replaced with a complete new set of information. This is particularly advantageous when the invention is embodied in a mobile phone, for example, as use of expensive airtime (for which the user typically is charged) may be reduced.

April 13, 2000 Response to Office Action in '565 application, at 16-17 (emphasis in original) (Exhibit E [1046-1047]).

In the Office Action dated 28 May 1998 in the parent application, it is alleged that Claim 31 (identical to claim 31 presented by this amendment) lacked novelty under 35 USC 102 over US Patent No. 4,850,009 (to Zook et al), ... It is apparent from the above discussion that the Zook reference makes absolutely no reference whatsoever to updating information previously stored in rewritable memory of the hand held unit for selectable items, and furthermore that no reference is made to a controller of the hand held unit "being responsive to a said command to cause downloading of information from said remote processing center as required for updating information previously stored in said rewritable storage for selectable items" as set forth in claim 31.

Id. at 20 (Ex. E [1050]). *See also id.* at 23-25 (distinguishing application claim 76 from Zook). DataQuill concluded:

In view of the above comments, it is respectfully submitted that Claims 31, 53, and 76 are novel over the Zook reference which also fails in any way to suggest the combination of features set forth in claim 31 or claim 53 or claim 76 which are therefore not rendered unpatentable over Zook. Claims 32 to 52, 54 to 75 and 77 add subject matter to the features of their respective parent claims 31, 53, and 76 and thus are further distinguished over Zook. Further, none of the other references relied upon by the Examiner disclose or suggest the particular combinations of features and functionality recited in any of claims 31 - 77.

Id. at 25 (emphasis in original) (Ex. E [1055]).

In a December 16, 2003 Office Action (Ex. E [1196-1208]), and after considering DataQuill's traverse in an attempt to distinguish the claims from the prior art in its April 13, 2000 Response, the Examiner rejected all pending claims, except for four dependent claims --66, 68, 72, and 73 based on the Koenck reference, U.S. Patent No. 5,410,141 (Ex. K [2350-2392]). *See* December 16, 2003 Office Action in '565 application file history (Ex. E [1196-1208]), at 1. It was only after the Examiner relied on the statements mentioned above did DataQuill attempt to withdraw its disclaimed subject matter. DataQuill's attempted disavowals

¹¹ See June 15, 2004 Amendment in the '565 application file history (Ex. E [1233-1236]), at 3 (Remark: "Applicants are not responding to the rejections [of all pending claims] in the outstanding Office Action, as they wish to allow this application to go abandoned in favor of a continuation application being filed herewith to ensure that information that has come to Applicants' attention is made of record. Applicants also withdraw and disavow reliance on their arguments in regard to Claims 31 and 76 made in the paper filed on April 13, 2000. Applicants further note that such arguments were not accepted by the Examiner."). HTC notes that the file history indicates the Examiner accepted Applicants' traverse, as explained above. See also June 15, 2004, Preliminary Amendment to Application 10/869,215 leading to the '591 patent (Ex. F [1262-1272]), at 3 ("Applicants also withdraw and disavow reliance on their arguments in regard to Claims 31 and 76 made in the paper filed April 13, 2000 in parent

were ineffective, because DataQuill's statement that it disavowed a prior argument in the prosecution history was not sufficiently clear to inform the examiner that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited. *See Hakim v. Cannon Avent Group, PLC*, 479 F.3d 1313, 1317-1318 (Fed. Cir. 2007). *See also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003) ("The public notice function of a patent and its prosecution history requires that a patentee be held to what he declares during the prosecution of his patent.").

DataQuill failed to otherwise respond to the Office Action and abandoned the '565 application but noted that it was filing a continuation application to pursue claims which included claims 66, 68, 72, and 73 rewritten in independent form. (Ex. E [1233-1236]). DataQuill filed the continuation application leading to the '591 patent. Claims 1-4 of the original application leading to the '591 patent included the limitations of claim 66, 68, 72, and 73 of the claim of the '565 application. During the prosecution of the application leading to the '591 patent, claims 1 and 2 were rejected, then cancelled by DataQuill, and the original '591 patent issued. (Ex. B [[0061]).

These extensive passages showing DataQuill's clear and unmistakable disclaimer of subject matter (from the apparent construction that DataQuill asserts) establish that these terms concerning the "updating" limitations require downloading of only information that has *changed*. As such, this Court should adopt HTC's proposed constructions, which are completely consistent with those positions that DataQuill took and the USPTO accepted during prosecution of the patents-in-suit. It is noted that the same analysis described above applies to the remainder of the terms found in Tab 2 attached to the Declaration in Support of HTC's Motion, filed currently, for the same reasons as discussed in this section: each of the terms includes the "updating" or "up to date" limitation in the same context described herein.

application serial number 09/548,565. Applicants further note that such arguments were not accepted by the Examiner."). Further, DataQuill's statement that "Applicants further note that such arguments were not accepted by the Examiner" were incorrect, and misleading at best. And DataQuill also failed to provide a sufficiently clear statement in either of the reexamination proceedings for the patents-in-suit to avoid the effects of the disclaimer.

6. "Means for Displaying" Terms

	Term	Claims containing the term	HTC's Proposed Construction	DataQuill's Proposed Construction
1	means for displaying a plurality of selectable items	'304 Patent Independent 100, 101 Dependent 20, 53	a display, a display screen, or a touch sensitive screen, and equivalents thereof	DataQuill provided numerous quotations from the specification, and added "and equivalents thereof" at the end of the citations. <i>See</i> Document 61.
2	additionally comprising as well as or instead of said display screen, and separate from said hand holdable unit, means for displaying a selectable item with associated data sources for user selection of an item by operation of said hand holdable unit	'304 Patent Independent 107, 109	a television screen separate from the handholdable unit, and equivalents thereof	DataQuill provided numerous quotations from the specification, and added "and equivalents thereof" at the end of the citations. <i>See</i> Document 61.
3	additionally comprising as well as or instead of said display screen, and separate from said data entry device, means for displaying a selectable item with associated data sources for user selection of an item by operation of said data entry device	'304 Patent Independent 94, 95, 103, 104	a television screen separate from the data entry device, and equivalents thereof	DataQuill provided numerous quotations from the specification, and added "and equivalents thereof" at the end of the citations. <i>See</i> Document 61.

The Parties agree that each of the above is a means plus function term to be construed pursuant to 35 U.S.C. $\S 112 \P 6$.

Regarding the first term, each of independent claims 100 and 101 and dependent claims 20, 52, and 53 of the '304 patent calls for a "means for displaying a plurality of selectable items." Because this phrase uses the terms "means for" without recited a structure, 35 U.S.C. § 112 ¶ 6 is invoked. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). The claimed function is "displaying a plurality of selectable items." The following structures perform the claimed function of displaying a plurality of selectable items: (1) the display 20 (see '304 patent, Figure 10); a display screen 20 (see '304 patent, 2:13-30 and 6:54-7:10), or a touch

CASE NO. 08cv543 IEG (BGS)

sensitive screen 90 ('304 patent, Figure 8 and 12:65-13:17, showing touch sensitive screen 90). Therefore, the proper construction of this term is a display, a display screen, or a touch sensitive screen, and equivalents thereof. *See* 35 U.S.C. § 112 ¶ 6.

Regarding the second means-plus-function term, independent claims 107 and 109 of the '304 patent include the limitation of "additionally comprising as well as or instead of said display screen, and separate from said hand holdable unit, means for displaying a selectable item with associated data sources for user selection of an item by operation of said hand holdable unit." This phrase includes the term "means for displaying a selectable item with associated data sources for user selection of an item by operation of said hand holdable unit," which recites a function without providing the requisite structure, invoking 35 U.S.C. § 112 ¶ 6. The claimed function of this term is displaying a selectable item with associated data sources for user selection of an item by operation of said hand holdable unit. Additionally, the term requires that the structure is "as well as or instead of said display screen and separate from the hand holdable unit."

The structure described in the specification of the '304 patent for performing this claimed function, and which comprises as well as or instead of said display screen and separate from the handholdable unit, is a television screen. *See, e.g.,* '304 patent, 17:59-67 ("In a merchandising system, where bar codes or other codes are associated with merchandisable items, this could be achieved simply by means of a printed catalogue, or some other form of list, or as a result of codes applied to examples of the products in question, or as a result of codes displayed, for example, on a TV screen with images relating to those products. The only requirement is that the display of the codes are readable by the data entry system of the present invention."); *see also*, '304 patent, 4:62-5:10 ("It enables the user to make shopping selections from a catalogue or from a series of options displayed on a television screen from the comfort of his or her home without the need to connect the device to a conventional telephone network. A hand held unit including a wireless telephone network interface such as a cellular network interface finds particular application where the user of the system is travelling from place to place and may need to perform data entry functions when they are far from a conventional wired telephone network

2
 3
 4

socket."). The proper construction of this term is therefore: a television screen separate from the hand holdable unit, and equivalents thereof.

Regarding the third means-plus-function term, claims 94, 95, 103, and 104 of the '304 patent include the limitation of "additionally comprising as well as or instead of said display screen, and separate from said *data entry device*, means for displaying a selectable item with associated data sources for user selection of an item by operation of said *data entry device*." This term is identical to the term discussed immediately above, with the exception of exchanging the "handholdable unit" and the "data entry device," a distinction that makes no difference in the context of the proper construction of this term. The proper construction of this term is therefore: a television screen separate from the handholdable unit, and equivalents thereof, for the same reasons as set out above.

7. "Written text" terms

Term	Claims containing the	HTC's Proposed	DataQuill's Proposed
	term	Construction	Construction
written text	'304 Patent	handwritten text	means what it says and
	<u>Independent</u>		no elaboration is needed
	80, 81, 82, 83		

Each of independent claims 80, 81, 82 and 83 of the '304 patent includes the limitation of "wherein a said reading sensor is for reading coded data such a fingerprints or signatures or written text." (claims 80, 82, and 83) or, "wherein said coded data comprises fingerprints, or signature, or written text" (claim 81). While the term "written text" appears in the claims, it does not appear in the specification of the '304 patent.

However, the patent describes "text" is described as printed text appearing on the display. See '304 patent, 11:13-24 ("In this example of operation, in step S4, when an option 'Left-handed operation' is encountered on the screen, the pen is scanned of the 'Enter' command bar code on the command sheet of FIG. 6. Whereas for right-handed operation, where text is displayed in English, the text is displayed in sequence from the end of the display nearest the reading head 14 towards the opposite end, for left-handed operation the text display is inverted with the text then reading from the end of the display furthest from the reading head to the end

nearest thereto."). Therefore, a distinction must be made between "written text" and mere "text." *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (claims are interpreted with an eye toward giving effect to all terms in the claim). DataQuill could have used the word "text" but chose to add the adjective "written" to arrive at the claimed "written text" instead.

Further, since "written text" does not appear in the '304 patent specification, it is appropriate to refer to extrinsic evidence. One appropriate dictionary definition for "write/written" is Webster's Tenth New Collegiate Dictionary 1367 (1993) (Ex. C [129]): "write/written: 1(a) to form (as characters or symbols) on a surface with an instrument (as a pen); b: to form (as words) by inscribing the characters or symbols of on a surface." As such, the proper construction for "written text" is: handwritten text.

8. "Natural language" terms

Term	Claims containing	HTC's Proposed	DataQuill's Proposed
	the term	Construction	Construction
natural language characters	'340 Patent Independent 80, 81, 82, 83, 100, 101 Dependent 20, 41, 53	user understandable language characters such as common English	means what it says and no elaboration is needed; Alternatively: user understandable language characters such as common English

Independent claims 80, 81, 82, 83, 100, and 101 dependent claims 20, 41, and 53 of the '304 patent include the limitation regarding "natural language characters." *See, e.g,* claims 80, 81, 82, and 83 ("the controller is arranged to access the store information for selectable items to determine natural language characters or images corresponding to the coded data for display"). The '304 patent discloses functionality relating to natural language characters at column 5, lines 18-29 ("The invention also provides a carrier for a plurality of data and/or command codes e.g., bar and/or dot codes) for association with means for displaying a plurality of selectable items in a data entry system or a merchandising system as defined above, wherein the carrier carriers a plurality of codes, each for a respective one of a plurality of natural language and/or numeric characters, and a plurality of commands for controlling the operation of the data entry or merchandising system, each code being associated with a visual representation of the corresponding natural language or numeric character or command and/or of a graphical

representation thereof."). However, the '304 patent does not define "natural language characters" specifically. Accordingly, it would be appropriate to refer to extrinsic evidence. One appropriate dictionary definition is: "natural language (software): A language whose rules are based on current usage without being explicitly prescribed. Examples include English, Chinese, French and Swahili." IEEE Standard Dictionary of Electrical and Electronics Terms 566 (3rd ed. 1984) (Ex. C [117]).

DataQuill's primary position is that "the term means what it says and no elaboration is needed." However, if the term is to be construed, DataQuill's alternative proposed construction is identical to HTC's proposed construction. Since HTC has requested construction of this term for the benefit of the jury, the Court should consider the term during the claim construction process. Because construction would aid the jury, the Court should adopt HTC's construction. The proper construction for "natural language characters" is: user understandable language characters such as common English.

9. "Comprises one or two manually operable switches for scrolling said display in a first and/or second direction"

Term	Claims	HTC's Proposed	DataQuill's Proposed
	containing the	Construction	Construction
	term		
"comprises one or	'304 patent	includes only one or	includes at least one or
two manually	<u>Dependent</u>	only two devices that	two devices for making,
operable switches	claims 8, 39	can be operated by	breaking or changing the
for scrolling said		hand to make or	connections in an
display in a first		break an electrical	electrical circuit, which
and/or second		connection for	can be operated by hand,
direction"		moving up or down	for stepping through text
		through a sequential	or graphics displayed on a
		display of	display
		information	

Dependent claims 8 and 39 add the limitation that the data entry device "comprises one or two manually operable switches for scrolling said display in a first or second direction..." This term should be construed to mean "includes only one or only two devices that can be operated by hand to make or break an electrical connection for moving up or down through a sequential display of information."

21

24

25

26

27 28

The plain meaning of "switch" is a device that can be operated to make or break an electrical connection. It is plain meaning that a "manually operable switch" is a switch that is operated by hand. Thus, it follows that a manually operable switch is a device that can be operated by hand to make or break an electrical connection. "Scrolling a display" means moving up or down through a sequential display of information. '304 patent, 7:15-18, 12:12-18. An important aspect of the term "one or two manually operable switches for scrolling said display" is that it specifically calls for "one or two." The parties dispute the meaning of "comprises one or two" in this overall claim term. HTC contends that the use of "comprises one or two" is that the device includes only one switch that can be used for scrolling, or the device includes only two switches that can be used for scrolling, but the device cannot contain more than two switches that can be used for scrolling. While this claim begins with the word "comprises," which typically has the meaning of "including, but not limited to," the inclusion of the words "one or two" supersedes the open ended nature normally created by "comprising." The reason for this is that "one or two" adds a requirement of a specific number. To allow "comprises one or two" to mean one or two or three or twenty-six, as DataQuill's approach would allow, would render the words "one or two" meaningless. It is a basic tenet of claim construction that all words in a claim must be given meaning. *Innova/Pure Water, Inc.*, 381 F.3d at 1119.

The patent specifically teaches the advantages of one or two key switches and the elimination of a keyboard (which could contain more switches):

Also, although in the present examples two mechanical key switches are provided, in other embodiments one key switch only could be provided. Operating that key switch a predetermined number of times within a short period could be used to emulate the provision of two key switches for scrolling and other functions. More key switches could also be provided in other embodiments. For example, a numerical keypad could be provided. However, in preferred embodiments of the invention, the number of keys should be kept as low as possible for any particular application. As in the embodiments described above, two key switches are preferred. The control sheet or data carrier effectively forms a keyboard extension for the pen.

'304 patent, 17:23-35. While the patent discloses that it could be possible to have more than two switches, the claim at issue must be interpreted as being directed to the specific preferred embodiments that have only one or two switches because of the way that the claim is worded.

Otherwise, the patent applicants could have worded the claim in a way that did not limit the device to one or two switches.

Perhaps most significantly, the Federal Circuit has interpreted claims containing similar terms and has concluded that they are limitations despite the use of the word "comprising." In *Innovad Inc. v. Microsoft Corp.*, 260 F.3d 1326 (Fed. Cir. 2001), the court dealt with the interpretation of a claim of U.S. Patent No. 4,882,750, which, in pertinent part, contained the following language directed to a telephone dialer system having elements [a] through [f]:

A telephone dialer system, comprising:

[a] a case having at least one surface...

* * *

[f] a <u>single</u>, bi-state switch operable from the exterior of said case for activating said signal means to produce said sequence of dual tone modulated frequency signals during said dialing mode corresponding to said digits in said reprogrammable memory means;

[g] programming means for programming said reprogrammable memory means with said at least one telephone number during said programming mode;

* * *

Id. at 1329 (emphasis added). The function of the switch in element [f] is to produce tones for dialing a stored number. *Id.* at 1333.

The Federal Circuit explained that claim elements [a] through [f] make up what is referred to in the patent specification as a "dialer unit" and that the claimed telephone dialing system contains three parts: 1) a dialer unit (elements [a]-[f]); 2) a programming means (element [g]); and 3) a means for releasably electrically coupling the reprogrammable memory means (element [h]). *Id.* at 1331. One issue in the case was whether the reference in element [g] to a "single, bi-state switch" precluded the presence of other switches in the telephone dialing system. The court further explained that the patent specification repeatedly stated that the dialer unit (claimed as elements [a]-[f]) does not contain a keypad, *Id.* at 1331-1332; "[a] keypad, after all, has a number of switches," *Id.* at 1333; and that, when properly construed, "the programming means--element [g]--may include a keypad." *Id.* at 1331-1332. However, while the court concluded that the recitation of a "single, bi-state switch..." in the claimed dialer unit

3 4 5

6 7

8 9

10 11

12 13

14

15

16 17

18

19 20

21

22

23

24

25

26

27

28

did not preclude the presence of other bi-state switches on the exterior of the dialer unit, it did preclude the presence of other switches for performing the recited function:

For the reasons stated above, the dialer unit does not have a keypad. The term "single, bi-state switch," as well as the specification describing that term, do not limit the dialer unit to only one bi-state switch. The claim language does not preclude other switches on the exterior of a dialer unit, such as another switch to choose a different preprogrammed telephone number. The term "single," however, precludes the use of multiple switches to perform the activating function for one phone number. Only a single switch activates the dialing function for a preprogrammed number.

Id. at 1333 (emphasis added).

Under the Federal Circuit's reasoning, while the language "comprises one or two manually operable switches for scrolling said display in a first and/or second direction..." in the claims of the '304 patent would not preclude the presence of other switches, this language would preclude the presence of any other manually operable switches that perform the function of scrolling the display in a first or second direction. Thus, any infringing product would have to contain one or two switches that could be used for scrolling the display but could not contain any more than two switches for scrolling the display.

"Downloading" and "To Download" Terms 10.

On page 13 of the Joint Claim Construction Chart (document 61), the term "to download" is highlighted in claim 62, with proposed constructions provided. Similarly, on page 14 of the same document, the term "downloading" appears in bold for claim 62, with proposed constructions provided. However, since these terms are subsumed in the "updating" and "up to date" terms described above, HTC believes "downloading" and "to download" terms, in isolation, should be given their ordinary meaning.

///

///

1 VII. **CONCLUSION** 2 For the foregoing reasons, this Court should adopt the foregoing claim constructions proposed by HTC. 3 4 Dated: December 3, 2010 Respectfully submitted, 5 6 WILSON TURNER & KOSMO LLP 7 By: /s/ Frederick W. Kosmo, Jr. FREDERICK W. KOSMO, JR. 8 THERESA OSTERMAN STEVENSON 550 West C Street, Suite 1050 9 San Diego, California 92101 Tel: 619.236.9600 10 Fax: 619.236.9669 E-mail: fkosmo@wilsonturnerkosmo.com 11 E-mail: tstevenson@wilsonturnerkosmo.com 12 **HOWREY LLP** PETER J. CHASSMAN 13 (admitted pro hac vice) GREGORY A. DUFFEY (admitted pro hac vice) 1111 Louisiana, 25th Floor 14 15 Houston, Texas 77002 Telephone: 713.787.1400 Facsimile: 713.787.1440 16 E-mail: chassmanp@howrey.com 17 E-mail: duffeyg@howrey.com 18 Attorneys for Defendant and Counterclaimant HTC CORPORATION 19 20 21 22 23 24 25 26 27 28